

**AMENDMENTS TO THE CLAIMS**

1-22. (Canceled)

23. (Currently Amended) A vector comprising an Arabidopsis nucleic acid sequence encoding an amino acid sequence for an Ftn2 protein, ~~wherein said amino acid sequence contains a portion selected from the group consisting of residues 747-801, residues 679-799, residues 623-691, residues 316-381, residues 244-277, residues 186-221, and residues 95-121 of SEQ ID NO: 2 wherein said vector encodes a product that functions in division of a photosynthetic prokaryote or a plastid.~~
24. (Previously Presented) The vector of Claim 23, wherein said vector further comprises a heterologous promoter.
25. (Previously Presented) A cell transformed with said vector of Claim 23.
26. (Previously Presented) The cell of Claim 25, wherein said cell is a plant cell or a microorganism cell.
27. (Previously Presented) A plant transformed with a heterologous gene comprising a nucleic acid sequence encoding SEQ ID NO: 2, wherein said gene encodes a product that functions in division of a photosynthetic prokaryote or a plastid.
28. (Previously Presented) A plant cell of said plant of Claim 27.
29. (Currently Amended) A plant seed of said plant of Claim 27, wherein said seed comprises said heterologous gene.
30. (Previously Presented) The plant of Claim 27, wherein said nucleic acid is operably linked to a heterologous promoter.

31. (New) A vector comprising a nucleic acid sequence encoding an amino acid sequence, wherein said amino acid sequence comprises SEQ ID NO: 2.
32. (New) The vector of Claim 31, wherein said vector further comprises a heterologous promoter.
33. (New) A cell transformed with said vector of Claim 31.
34. (New) The cell of Claim 33, wherein said cell is a plant cell or a microorganism cell.
35. (New) A vector comprising a cyanobacterial nucleic acid sequence encoding an amino acid sequence for an Arabidopsis Ftn2 homolog protein.
36. (New) The vector of Claim 35, wherein said vector further comprises a heterologous promoter.
37. (New) A cell transformed with said vector of Claim 35.
38. (New) The cell of Claim 37, wherein said cell is a plant cell or a microorganism cell.
39. (New) A vector comprising an Oryza nucleic acid sequence encoding an amino acid sequence for an Arabidopsis Ftn2 homolog protein.
40. (New) The vector of Claim 39, wherein said vector further comprises a heterologous promoter.
41. (New) A cell transformed with said vector of Claim 39.
42. (New) The cell of Claim 41, wherein said cell is a plant cell or a microorganism cell.